We claim:

1. A non-photosensitive direct thermographic material comprising a support and on one or both sides thereof, one or more thermally sensitive imaging layers and an outermost non-thermally sensitive protective layer disposed over said one or more thermally sensitive imaging layers,

said one or more thermally sensitive layers having in reactive association, a non-photosensitive source of reducible silver ions and a reducing agent for said reducible silver ions, and

said outermost protective layer comprising:

(a) a solid polymer derived from one or more olefins and from one or more ethylenically unsaturated polymerizable carboxylic acids or esters or anhydrides thereof, and

(b) a branched α-olefin polymer, and

(c) optionally, an additional wax,

wherein the total amount of component (a), component (b), and optionally component (c) is from about 0.1 to about 2.5 g/m^2.

2. The thermographic material of claim 1 wherein said outermost protective layer has a dry thickness of from about 0.1 to about 10 μm.

3. The thermographic material of claim 1 wherein said outermost protective layer comprises all three components (a), (b), and (c).

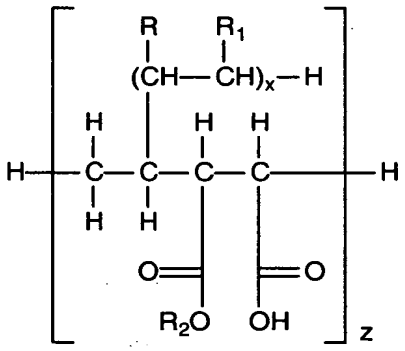
4. The thermographic material of claim 1 wherein said component (c) is a microcrystalline wax, carnauba wax, petronauba wax, paraffin wax, candelilla wax, or a linear low molecular weight polyethylene.

5. The thermographic material of claim 1 wherein said outermost protective layer further comprises a matting agent that comprises from about 0.2 to about 10 dry weight % of said outermost protective layer.

6. The thermographic material of claim 1 wherein said component (a) is a solid polymer that is derived from one or more α-olefins having 2 to 8 carbon atoms and from one or more ethylenically unsaturated polymerizable carboxylic acids or esters or anhydrides thereof having from 3 to 12 carbon atoms

7. The thermographic material of claim 6 wherein said component (a) is a solid polymer derived from ethylene, propylene, or both, and from maleic acid, ethyl maleic acid, propyl maleic acid, isopropyl maleic acid, fumaric acid, methylene malonic acid, glutaconic acid, itaconic acid, methyl itaconic acid, mesaconic acid, citraconic acid, an ester or anhydride or any of these, or a mixture thereof.

8. The thermographic material of claim 1 wherein said component (a) is a solid polymer represented by the following Structure (I):



(I)

wherein R and R_1 individually represent hydrogen or an alkyl group having 1 to 10 carbon atoms, x is a number of from 9 to 75, R_2 is hydrogen or an alkyl group having 1 to 3 carbon atoms, and z is from about 5 to about 20.

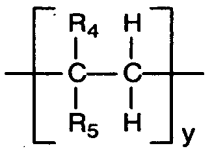
9. The thermographic material of claim 8 wherein said component (a) is a maleic anhydride polyethylene, maleic acid anhydride

polypropylene, isopropylmaleate polyethylene, or isopropylmaleate polypropylene graft copolymer.

10. The thermographic material of claim 1 wherein component (b) has a number average molecular weight of at least 300 and up to 10,000, a degree of branching of from about 4 to about 15, and a melting point or softening point of up to 120°C.

11. The thermographic material of claim 10 wherein component (b) has a number average molecular weight of from about 400 to about 5000, a degree of branching of from about 5 to about 10, and a melting point or softening point of from about 35 to about 110°C.

12. The thermographic material of claim 1 wherein component (b) is represented by the following Structure (II):



(II)

wherein R_4 is an alkyl group having 4 to 50 carbon atoms, R_5 is hydrogen or an alkyl group having 6 to 50 carbon atoms, and y is from 10 to 500.

13. The thermographic material of claim 1 wherein the weight ratio of component (a) to component (b) is from about 1:10 to about 10:1 and component (a) is present in an amount of from about 0.01 to about 1 g/m^2.

14. The thermographic material of claim 13 further comprising component (c) and wherein the weight ratio of component (a) to component (c) is

from about 1:10 to about 10:1, and the weight ratio of component (b) to component (c) is from about 1:10 to about 10:1.

15. The thermographic material of claim 14 wherein the weight ratio of component (a) to component (b) is from about 1:2 to about 2:1, the weight ratio of component (a) to component (c) is from about 1:2 to about 2:1, and the weight ratio of component (b) to component (c) is from about 1:2 to about 2:1.

16. The thermographic material of claim 1 wherein said non-photosensitive source of reducible silver ions includes one or more silver carboxylates, one of which is silver behenate.

17. The thermographic material of claim 1 wherein said reducing agent composition comprises an aromatic di- or tri-hydroxy compound or mixtures thereof.

18. The thermographic material of claim 1 wherein said one or more thermally sensitive imaging layers further comprise one or more aliphatic or aromatic polycarboxylic acids.

19. A black-and-white, non-photosensitive direct thermographic material that comprises a transparent polymer support having on only one side thereof one or more thermally sensitive imaging layers and an outermost non-thermally sensitive protective layer over said one or more thermally sensitive imaging layers,

said one or more thermally sensitive imaging layers comprising predominantly one or more hydrophobic binders, and in reactive association, a non-photosensitive source of reducible silver ions that includes one or more silver aliphatic carboxylates at least one of which is silver behenate, a reducing agent for said non-photosensitive source reducible silver ions comprising an aromatic

di- and tri-hydroxy compound having at least two hydroxy groups in *ortho-* or *para*-relationship on the same aromatic nucleus or mixture thereof, and

a conductive layer on the opposite side of said support,

said outermost protective layer comprising a matting agent in an amount of from about 1 to about 10 weight % of the total dry weight of said outermost protective layer, and said outermost protective layer further comprising all three of the following components (a), (b), and (c):

(a) a polyolefin solid polymer having a molecular weight of about 700, an acid number of 160, a saponification number of 212, a penetration index at 25°C of 3, a melting point of 78°C, and that is the reaction product of α-olefin with maleic anhydride and mono-isopropyl maleate,

(b) a branched α-olefin polymer having a number average molecular weight of about 4400, a softening point of 74IC, and

(c) a linear polyethylene wax having a weight average molecular weight of about 450 and a melting point of 81°C,

wherein the weight ratio of component (a) to component (b) is from about 1:2 to about 2:1, the weight ratio of said component (a) to component (c) is from about 1:2 to about 2:1, and the weight ratio of component (b) to component (c) is from about 1:2 to about 2:1, and

component (a) is present in an amount of from about 0.01 to about 1 g/m^2.

20. The thermographic material of claim 19 wherein said conductive layer comprises non-acicular metal antimonate particles composed of $ZnSb_2O_6$.

21. A method comprising imaging the direct thermographic material of claim 1 with a thermal imaging source to provide a visible image.

22. The method of claim 21 wherein said thermographic material comprises a transparent support and said image-forming method further comprises:

positioning said imaged thermographic material with the visible image thereon between a source of imaging radiation and an imageable material that is sensitive to said imaging radiation, and

thereafter exposing said imageable material to said imaging radiation through the visible image in said imaged thermographic material to provide an image in said imageable material.

23. A method comprising imaging the thermographic material of claim 19 with a thermal imaging source to provide a visible image.

24. The method of claim 23 wherein said imaging is carried out using a thermal printhead and said thermographic material is moved in contact with and relative to said thermal printhead.

25. The method of claim 21 wherein the imaged direct thermographic material is used for medical diagnostic purposes.